

CHAPTER 2.3.3.

BOVINE TUBERCULOSIS

Article 2.3.3.1.

The recommendations in this Chapter are intended to manage the human and animal health risks associated with *Mycobacterium bovis* (*M. bovis*) infection in domestic (permanently captive and owned free-range) bovines including cattle (*Bos taurus*, *B. indicus* and *B. grunniens*), water buffaloes (*Bubalus bubalis*) and wood bison (*Bison bison* and *B. bonasus*)

Standards for diagnostic tests are described in the *Terrestrial Manual*.

Article 2.3.3.2.

Country, zone free from bovine tuberculosis

To qualify as free from bovine tuberculosis, a country, ~~zone or compartment~~ should satisfy the following requirements:

COMMENT: “or compartment” should be removed until 2.3.3.2bis. is finalized. This is recommended wherever the word “compartment” appears in this document.

1. *M. bovis* infection in domestic (permanently captive and owned free-range) bovines including cattle water buffalo and wood bison is a *notifiable disease* in the country;
2. an on-going awareness programme should be in place to encourage reporting of all cases suggestive of bovine tuberculosis;
3. regular and periodic testing of all cattle, water buffalo, and wood bison herds ~~did not detect~~ demonstrated that *M. bovis* infection was not present in at least 99.8% of the herds and 99.9% of the animals in the country or zone for 3 consecutive years;

COMMENT: It appears the original language requires live animal testing of all cattle, bison and water buffalo herds in country or zone for 3 years consecutively. My suggested changes are directed towards allowing testing of a number of herds to statistically demonstrate that disease is not present in the country or zone.

The allowance of $\geq 0.01\%$ but $< 0.2\%$ prevalence would be considered modified accredited status in the U.S. program. The U.S. experience would not allow cattle from such a region to move without testing.

4. a surveillance programme should be in place to detect bovine tuberculosis in the country, or *zone* through ante-mortem and post-mortem inspection as described in Appendix 3.10.1.;
5. if the surveillance programme described in points 3 and 4 above has not detected *infection* with *M. bovis* for 5 consecutive years, surveillance may be maintained through ante-mortem and post-mortem inspection as described in Appendix 3.10.1.;
56. cattle, water buffalo and, wood bison introduced into a country, or *zone* free from bovine tuberculosis should be accompanied by a certificate from an *official Veterinarian* attesting that they come from a country, or *zone* or herd free from bovine tuberculosis or comply with the relevant provisions in Article 2.3.3.4. or in Article 2.3.3.5.

Article 2.3.3.2bis. (under study)

Compartment free from bovine tuberculosis

To qualify as a *compartment* free from bovine tuberculosis, a herd or herds of cattle, water buffalo or wood bison should be certified by the *Veterinary Authority* as satisfying the following requirements:

1. cattle, water buffalo and wood bison in the herd or herds:
 - a) showed no sign of bovine tuberculosis or lesions at ante-mortem or post-mortem inspection for at least 3 consecutive years;
 - b) over 6 weeks of age, have shown a negative result to at least two tuberculin tests carried out at an interval of a minimum of 6 months, the first test being performed at least 6 months following the *slaughter* of the last affected animal;
 - c) showed a negative result to an annual tuberculin test to ensure the continuing absence of bovine tuberculosis; or
 - i) showed a negative result to a tuberculin test every 2 years to ensure the continuing absence of bovine tuberculosis if the annual percentage of herds confirmed as infected with tuberculosis is not more than 1% of all herds in the country or *zone* during the last 2 years; or
 - ii) showed a negative result to a tuberculin test every 3 years to ensure the continuing absence of bovine tuberculosis if the annual percentage of herds confirmed as infected with tuberculosis is not more than 0.2% of all herds in the country or *zone* during the last 4 years; or

~~iii) showed a negative result to a tuberculin test every 4 years to ensure the continuing absence of bovine tuberculosis if the annual percentage of herds confirmed as infected with tuberculosis is not more than 0.1% of all herds in the country or zone during the last 6 years;~~

~~2. cattle, water buffalo and wood bison introduced into the compartment come from a herd free from bovine tuberculosis. This condition may be waived for animals which have been isolated for at least 90 days and which, prior to entry into the compartment, were subjected to at least two tuberculin tests carried out at a 6-month interval with negative results.~~

Article 2.3.3.3.

Herd free from bovine tuberculosis

To qualify as free from bovine tuberculosis, a herd of cattle, water buffalo or wood bison should satisfy the following requirements:

1. the herd is in a country, or *zone* free from bovine tuberculosis and is certified free by the *Veterinary Authority*; or
2. cattle, water buffalo and wood bison in the herd:
 - a) showed no sign of bovine tuberculosis or lesions at ante-mortem or post-mortem inspection for at least 3 consecutive years;
 - b) over 6 weeks of age, have shown a negative result to at least two tuberculin tests carried out at an interval of a minimum of 6 months, the first test being performed at least 6 months following the *slaughter* of the last affected animal;
 - c) showed a negative result to an annual tuberculin test to ensure the continuing absence of bovine tuberculosis; or
 - i) ~~showed a negative result to a tuberculin test every 2 years to ensure the continuing absence of bovine tuberculosis if the annual percentage of herds confirmed as infected with tuberculosis is not more than 1% of all herds in the country or zone during the last 2 years; or~~

COMMENT: A herd prevalence of 0.5% to 1% in a country or zone would be recognized as non-accredited in the U.S. program. Given the US experience in controlling and eradicating the disease agent, accredited herds are not recognized in non-accredited States or zones. Additionally, to further tighten controls, interstate movements of cattle from non-accredited States or zones are restricted to direct to slaughter under seal and permit. Result is that cattle from any herd in a State or zone with a prevalence of 0.5% to 1% are restricted from movement other than direct to slaughter.

Herd prevalence in the U.S. program is calculated using period-prevalence for the most recent 12 consecutive months. In i) above the prevalence is calculated over a 2 year period and below in ii) a 4 year period is used and in iii) below a 6 year period is used.

- ii) All animals in the herd showed a negative result to ~~a~~ an annual tuberculin test ~~every 3 years~~ to ensure the continuing absence of bovine tuberculosis if the annual percentage of herds confirmed as infected with tuberculosis is not more than 0.2% of all herds in the country or zone during the ~~last 4 years~~ previous year; or

COMMENT: A herd prevalence of 0.1% to <0.5% in a country or zone would be recognized as accreditation preparatory in the U.S. experience. Accredited herds in an accreditation preparatory State or zone are required to test all animals in the herd, regardless of age and that these tests be conducted annually.

- iii) All animals in the herd over 12 months of age showed a negative result to ~~a~~ an annual tuberculin test ~~every 4 years~~ to ensure the continuing absence of bovine tuberculosis if the annual percentage of herds confirmed as infected with tuberculosis is not more than 0.1% of all herds in the country or zone during the ~~last 6 years~~ previous year;

COMMENT: A herd prevalence of 0.01% to <0.1% in a country or zone would be recognized as modified accredited in the U.S. program. Accredited herds in an modified accredited State or zone are required to test all animals in the herd greater than 12 months of age and that these tests be conducted annually.

3. cattle, water buffalo, and wood bison introduced into the herd come from a herd free from bovine tuberculosis. This condition may be waived for animals which have been isolated for at least 90 days and which, prior to entry into the herd, were subjected to at least two tuberculin tests carried out at a 6-month interval with negative results with the second tuberculin test performed during the 30 days prior to entry into the herd.

COMMENT: The 30 day prior-to-entry test requirement is taken from 2.3.3.4., 3. and offers a level of confidence that animals so handled are not carrying disease undetected. The level of confidence could be increased if the 10 frame for the second test were reduced to 10 days but the selection of 30 days here, and later, was made to be consistent with other sections of these regulations

Article 2.3.3.4.

Veterinary Authorities of importing countries should require:

for cattle, water buffalo and wood bison for breeding or rearing

the presentation of an *international veterinary certificate* attesting that the animals:

1. showed no sign of bovine tuberculosis on the day of shipment;
2. originate from a herd free from bovine tuberculosis that is in a country, ~~zone or compartment~~ free from bovine tuberculosis; or
3. were subjected to the tuberculin test for bovine tuberculosis with negative results during the 30 days prior to shipment and come from a herd free from bovine tuberculosis; or
4. have been isolated for at least 90 days and prior to entry into the herd were subjected to at least two tuberculin tests carried out at a six-month interval with negative results with the second tuberculin test performed during the 30 days prior to entry into the herd.

COMMENT: The 30 day prior-to-entry test requirement is taken from 2.3.3.4., 3. and offers a level of confidence that animals so handled are not carrying disease undetected. The level of confidence could be increased if the 10 frame for the second test were reduced to 10 days but the selection of 30 days here, and later, was made to be consistent with other sections of these regulations.

Article 2.3.3.5.

Veterinary Authorities of importing countries should require:

for cattle, water buffalo and wood bison for slaughter

the presentation of an *international veterinary certificate* attesting that the animals:

1. showed no sign of bovine tuberculosis on the day of shipment;
12. originated from a herd free from bovine tuberculosis or were subjected to a tuberculin test for bovine tuberculosis with negative results during the 30 days prior to shipment;

23. were not being eliminated as part of an eradication programme against bovine tuberculosis.

Article 2.3.3.6.

Veterinary Authorities of importing countries should require:

for semen of cattle, water buffalo, and wood bison

the presentation of an *international veterinary certificate* attesting that:

1. the donor animals:
 - a) showed no sign of bovine tuberculosis on the day of collection of the semen;
 - b) were kept in an *artificial insemination centre* free from bovine tuberculosis in a country, ~~zone or compartment~~ free from bovine tuberculosis and which only accepts animals from free herds in a free country, ~~zone or compartment~~, or
 - c) showed negative results to tuberculin tests carried out annually and were kept in a herd free from bovine tuberculosis;
2. the semen was collected, processed and stored in conformity with the provisions of Appendix 3.2.1.

Article 2.3.3.7.

Veterinary Authorities of importing countries should require:

for embryos/ova of cattle, water buffalo and wood bison

the presentation of an *international veterinary certificate* attesting that:

1. the donor females:
 - a) and all other susceptible animals in the herd of origin showed no sign of bovine tuberculosis during the 24 hours prior to embryo collection;
 - b) originated from a herd free from bovine tuberculosis in a country, ~~zone or compartment~~ free from bovine tuberculosis; or
 - c) were kept in a herd free from bovine tuberculosis, and were subjected to a tuberculin test for bovine tuberculosis with negative results during an isolation period of 30 days in the *establishment* of origin prior to collection;
2. the embryos/ova were collected, processed and stored in conformity with the provisions of Appendix 3.3.1., Appendix 3.3.2. or Appendix 3.3.3., as relevant.

Article 2.3.3.8.

Veterinary Authorities of importing countries should require:

for *fresh meat* and *meat products* of cattle, water buffalo and wood bison

the presentation of an *international veterinary certificate* attesting that the entire consignment of meat comes from animals which have been subjected to *ante-mortem* and *post-mortem* inspections as described in Appendix 3.10.1.

Article 2.3.3.9.

Veterinary Authorities of importing countries should require:

for *milk* and *milk products* of cattle, water buffalo and wood bison

the presentation of an *international veterinary certificate* attesting that the consignment:

1. has been derived from animals in a herd free from bovine tuberculosis; or
2. was subjected to pasteurization; or
3. was subjected to a combination of control measures with equivalent performance as described in the Codex Alimentarius Code of Hygienic Practice for Milk and Milk Products.